

## CLAIMS

1. A reflection cowl for a bar-code scanner, the said scanner, comprising at least a light source, a convex light stick, a lens, a sensor element and a circuit board, is characterized that:

5        the light source wherein is a mono luminous element of light-emitting diode (LED) with a reflection cowl disposed in the rear aspect thereof; the said reflection cowl is divided by the center line passed through the light source into a left and a right portions of reflection curved surfaces; respectively, the left and the right portions of the curved surfaces have a plurality of concaved reflection spherical surfaces thereon; all the said reflection spherical surfaces have the function of distributing the light so as to make all the light rays reflected back from all the reflection spherical surfaces fall evenly on the convex light stick, thereby adjusting the curvature of the reflection cowl further adjusts the left and the right distribution areas of the reflected light, that means, evenly distributes the brightness at the center and on the side rim thereof.